

CLAIMS

[1] A binder for an electric double layer capacitor electrode, comprising a polymer which can give a polymer film having a tensile stress of 2 MPa or less when the film is elongated at the ratio of 100% and having the elongation at break of 450% or more.

[2] The binder according to claim 1, wherein the polymer is a polymer comprising a monomeric unit obtained by polymerizing a compound represented by the following general formula (1) in a total amount of 60% or more by weight:

$\text{CH}_2=\text{CR}^1-\text{COOR}^2$ (1) (wherein R^1 represents a hydrogen atom or a methyl group, and R^2 represents an alkyl group or a cycloalkyl group).

[3] The binder according to claim 1, wherein the polymer has a crosslinkable functional group.

[4] The binder according to claim 3, wherein the crosslinkable functional group is an N-methylolamide group.

[5] The binder according to claim 3, wherein the crosslinkable functional group is the combination of a sulfonic acid group or a salt thereof and an epoxy group.

[6] A binder composition for an electric double layer capacitor electrode, wherein the binder as claimed in claim 1

is dispersed in water.

[7] A slurry composition for an electric double layer capacitor electrode, comprising the binder composition as claimed in claim 6 and an active material for an electrode.

[8] An electrode for an electric double layer capacitor, wherein an electrode layer comprising the binder as claimed in claim 1 and an active material for an electrode are bound to a current collector.

[9] A method for producing an electrode for an electric double layer capacitor, comprising the steps of:
applying the electrode slurry composition as claimed in claim 7 to a current collector, and then
drying the composition.

[10] The method for producing an electrode for an electric double layer capacitor according to claim 9, further comprising the step of pressing the composition after drying thereof.

[11] The method for producing an electrode for an electric double layer capacitor according to claim 10, further comprising the step of heating the composition at 150 to 250°C.

[12] An electric double layer capacitor, comprising the electrode as claimed in claim 8.